

Amendments to the Specification:

The Paragraph beginning at Page 9, lines 14-17, is to be amended as follows:

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings,

Figure 1A is a schematic perspective view, partially cut away, of a unit cell of a printhead according to the invention;

Figure 1B is a schematic sectioned perspective view of a unit cell of a printhead according to the invention;

The Paragraph beginning at Page 11, lines ¹⁻³⁰~~5-32~~, through to Page ¹²~~13~~, lines ¹⁻¹⁰~~1-2~~, is to be amended as follows:

1/2/08
T.T.

Bubble Forming Heater Element Actuated Printheads

Figure 1A shows a nozzle of this type. The nozzles, ejection actuators, associated drive circuitry and ink supply passages are formed on and through a wafer using lithographically masked etching techniques described in great detail in USSN 10/302,274. In the interests of brevity, the disclosure of the '274 application is incorporated herein in its entirety. For convenience, the reference numerals on Figures 1A to 7 accord with the reference numbering used in '274. Corresponding features of the embodiments shown in Figures 8 to 20 do not necessarily use the same reference numerals.

The unit cell 1 is shown with part of the walls 6 and nozzle plate 2 cut-away, which reveals the interior of the chamber 7. The heater 14 is not shown cut away, so that both halves of the heater element 10 can be seen.

Figure 1B shows the liquid opassage that extends from each of the chambers 7 to the oppositie side of the wafer substrate 21. The liquid passage is formed by the hole 31 through the dielectric material of the interconnect 23 and into the monolithic wafer 21 and a supply passage 32 extending from the liquid supply side partially through the monolithic wafer 21. In combination, the hole 31 and the supply passage 32 provide the liquid passage that establishes a fluid connection between the chamber and the ink supply (not shown).

hole 31, a portion C of the circuitry 22 risks damage by the etchant due to misalignment of the supply passage 32.

The Paragraph beginning at Page 13, lines ⁷⁻¹⁷~~15-25~~, is to be amended as follows:

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J.T.

Referring to 5, 6 and 7, the present invention addresses this by etching the ~~inlet hole~~ hole 31 through the interconnect 23 and into the wafer 21 and then etching the ink supply passage 32 from the other side of the wafer 21, while ensuring that the ink supply passage is sufficiently wider than the ~~inlet hole~~ hole 31 to account for the inherent tolerances of the etching process. As best shown in Figure 5, the plasma does not get the opportunity to track along the interface and damage the CMOS drive circuitry. As the inlet hole 31 is relatively shallow, the removal of the resist is not overly difficult. This permits a more compact overall design and higher nozzle packing density. Using this technique, the sizes of the ink conduits are also relative small. Typically, the width of the inlet hole 31 is between 8 microns and 24 microns, and the width of the supply passage 32 is between 10 microns and 28 microns.